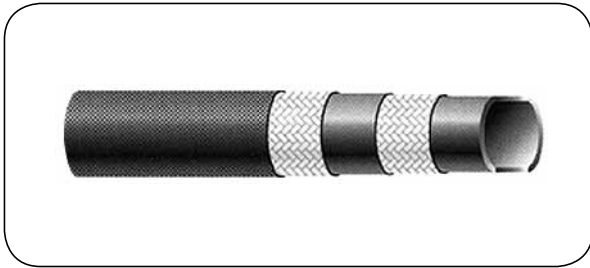


CLEANING AND WASHING - cleaning of sewage systems

Sewage cleaning hoses



IK 25

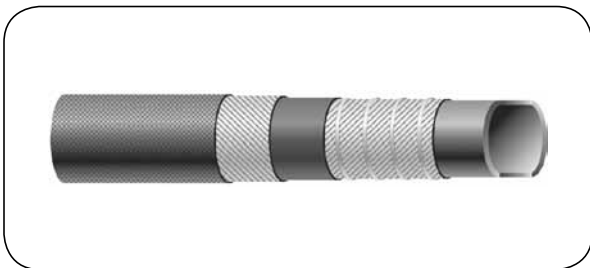
- Internal layer:** Black smooth NBR rubber
- Reinforcement:** Two textile braids
- External layer:** Black smooth NR/BR compound highly resistant to abrasion
- Working temp.:** From -35°C up to +80°C

Hose designed for pressure cleaning of sewage systems. Highly resistant to abrasion (EN ISO 6945:2000, max. 0.5 g (100N); DIN 53516:1987 - 40 mm³).

Supplied as a complete hose assembly with male or female BSP 60° thread fittings (e.g. code no. of the hose assembly IK 25, Ø1/2", 40 meter long - SP-IK25-68468136-040). Standard length: 40, 60, 80, 100, 120, 160, 180 m. Each hose assembly is pressure tested and delivered with a quality control certificate.

Other fittings and lengths are available - contact TUBES INTERNATIONAL® Technical Department.

code	I.D. [mm]	O.D. [mm]	thread size [inch]	working pressure [bar]	bursting pressure [bar]	bending radius [mm]	weight [kg/m]
SP-IK25-68468136-L	13	25	1/2	250	625	70	0.46
SP-IK25-68468196-L	19	31	3/4	250	625	95	0.61
SP-IK25-68468257-L	25	39	1	250	625	110	0.86
SP-IK25-68468328-L	32	48	1.1/4	250	625	150	1.27



IAL

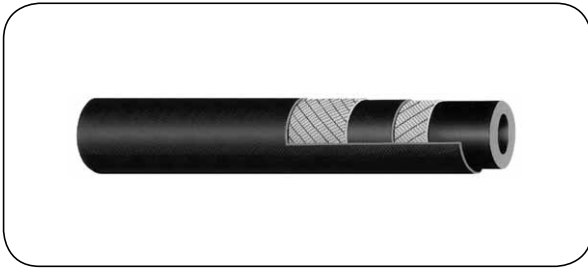
- Internal layer:** Black smooth, antistatic
- Reinforcement:** NR/SBR/BR compound
- External layer:** Two textile braids, helix wire Black EPDM rubber
- Working temp.:** From -35°C up to +80°C

Flexible suction-delivery hose intended for sewage cleaning and so used on sewage suction vehicles. Full flow is retained even at the minimum bending radius. Internal and external layer resistant to abrasion. Safety factor 3.15:1. Vacuum 0.9 bar. Standard length: 20, 40 m.

code	I.D. [mm]	O.D. [mm]	working pressure [bar]	bursting pressure [bar]	bending radius [mm]	weight [kg/m]
SP-IAL-56511008	100	116	6	18.9	400	4.70
SP-IAL-56511118	110	126	6	18.9	450	5.20
SP-IAL-56511039	125	144	6	18.9	600	6.40
SP-IAL-56511069	150	169	6	18.9	720	7.50

CLEANING AND WASHING - cleaning of sewage systems

Sewage cleaning hoses



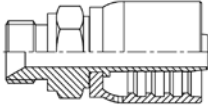
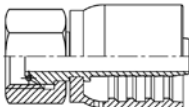
KUKA 250

Internal layer: Black, smooth synthetic rubber
Reinforcement: Two textile braids
External layer: Black, smooth synthetic rubber
Working temp.: From -40°C up to +70°C

Delivery hose designed for high pressure cleaning and flushing of sewage systems. External layer resistant to abrasion, oil mist and weather conditions. Manufactured according to EN ISO 1307 standard. Assembly - use SL-KUKA250-... (IT-58) fittings.

code	I.D. [mm]	O.D. [mm]	bending radius [mm]	working pressure [bar]	bursting pressure [bar]	weight [kg/m]	standard length [m]
SL-KUKA250-13	12.7	25	65	250	625	0.44	120
SL-KUKA250-16	16	28	75	250	625	0.48	120
SL-KUKA250-19	19	31.6	90	250	625	0.60	120
SL-KUKA250-25	25.4	39.3	100	250	625	0.78	120
SL-KUKA250-32	31.8	48	130	250	625	1.06	120
SL-KUKA250-38	38.1	54	150	250	625	1.25	120

KUKA 250 hose fittings

picture	code	thread size [inch]	hose I.D. [mm]	spanner size [mm]
Fitting with BSP male thread 	SL-KUKA250-13-BZ110-08	1/2	13	27
	SL-KUKA250-16-BZ110-10	5/8	16	27
	SL-KUKA250-19-BZ110-12	3/4	19	32
	SL-KUKA250-25-BZ110-16	1	25	41
	SL-KUKA250-32-BZ110-20	1.1/4	32	50
Fitting with BSP female thread 	SL-KUKA250-13-BW110-08	1/2	13	27
	SL-KUKA250-16-BW110-08	1/2	16	27
	SL-KUKA250-16-BW110-10	5/8	16	30
	SL-KUKA250-16-BW110-12	3/4	16	32
	SL-KUKA250-19-BW110-12	3/4	19	32
	SL-KUKA250-25-BW110-16	1	25	41
	SL-KUKA250-32-BW110-20	1.1/4	32	50

CLEANING AND WASHING - cleaning of sewage systems

Sewage cleaning hoses



FLEXY

Internal layer: Black smooth synthetic rubber
Reinforcement: One steel braid
External layer: Black smooth synthetic rubber
Working temp.: From -40°C up to +100°C

Very flexible hose designed for pressure cleaning of sewage systems. Highly resistant to abrasion. Electrical resistance of the internal and external layer is Ω/m . Supplied as a complete hose assembly with fittings. Other types of fittings and lengths are available - contact TUBES INTERNATIONAL® Technical Department.

code	I.D. [mm]	O.D. [mm]	thread size (inlet)	thread size (outlet)	working pressure [bar]	length [m]
RM-420311010	6	10.8	M22x1.5 female	1/4" BSP male	300	10
RM-420311015						15
RM-420311020						20
RM-420311025						25
RM-420311030						30
RM-420342010			1/4" BSP female	1/4" BSP male		10
RM-420342015						15
RM-420342020						20
RM-420342025						25
RM-420342030						30



JC 7

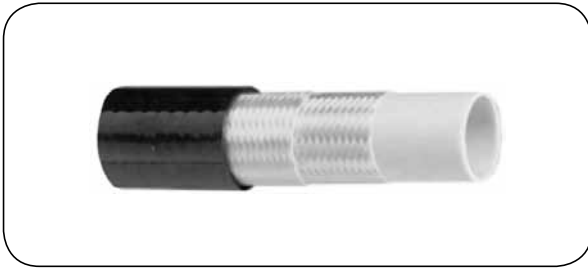
Internal layer: Thermoplastic polyester
Reinforcement: Two polyester braids
External layer: Orange polyurethane, abrasion resistant
Working temp.: From -40°C up to +55°C

Hose designed for high pressure cleaning of sewage systems. Standard length: 80, 100, 120, 150, 180, 200, 250 m. Assembly - use ZC-BPJC type fittings (IT-49).

code	I.D. [mm]	O.D. [mm]	working pressure [bar]	bursting pressure [bar]	bending radius [mm]	weight [kg/100 m]
ZC-JC7-10	9.7	16.5	275	690	55	15.80
ZC-JC7-13	13	22.4	275	690	75	27.70
ZC-JC7-16	16	26.5	220	550	100	37.20
ZC-JC7-19	19.2	29.8	200	500	120	43.10
ZC-JC7-25	25.6	37.3	200	500	150	58.00
ZC-JC7-32	32	46	200	500	235	84.80
ZC-JC7-38	38.2	54	200	500	375	118.6

CLEANING AND WASHING - cleaning of sewage systems

Sewage cleaning hoses

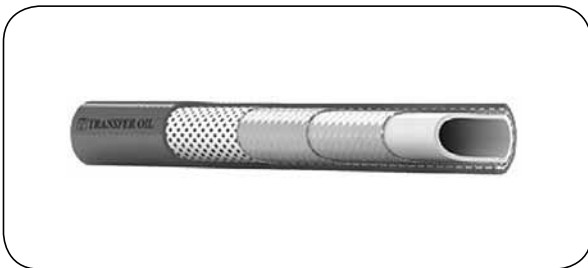


JC 8

Internal layer: Thermoplastic polyester
Reinforcement: Two polyester braids
External layer: Red polyurethane, abrasion resistant
Working temp.: From -40°C up to +55°C

Hose designed for high pressure cleaning of sewage systems. Standard length: 80, 100, 120, 150, 180, 200, 250 m. Assembly - use ZC-BPJC type fittings (IT-49).

code	I.D. [mm]	O.D. [mm]	working pressure [bar]	bursting pressure [bar]	bending radius [mm]	weight [kg/100 m]
ZC-JC8-03	3.5	8.5	345	862	25	5.70
ZC-JC8-05	4.8	10.5	345	862	30	8.20
ZC-JC8-06	6.4	12.7	345	862	50	10.80
ZC-JC8-10	9.7	16.5	345	862	75	15.70
ZC-JC8-13	13.0	22.4	345	862	100	29.20
ZC-JC8-19	19.2	29.8	250	625	120	46.00
ZC-JC8-25	25.6	37.3	250	625	150	64.30
ZC-JC8-32	32.0	46.0	250	625	235	98.50



ECOLOGY 210HD / 250HD

Internal layer: Polyethylene
Reinforcement: One or two synthetic fibre braids + one braid for cover integration
External layer: Polyurethane
 - E210HD - blue
 - E250HD - red
Working temp.: From -40°C up to +60°C

Hose designed for high pressure cleaning of sewage system. Suitable for water-based fluids used for cleaning, scrubbing, etc. Resistant to abrasion and microorganisms, flexible in a full range of working temperatures. Suitable for high humidity working conditions. The external layer is resistant to acids, bases, oil and grease. Not designed to transfer hydraulic fluids and solvents.


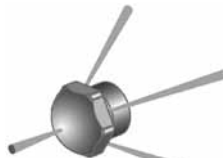
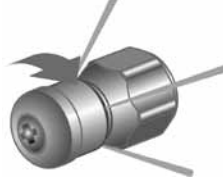
Supplied as a complete hose assembly with specified length "L" with male or female BSP 60° thread fittings (e.g. code no. of the assembly hose E250HN Ø1/2", 40 meter long - TO-E250HD-12-040). Standard length: 40, 60, 80, 100, 120, 150, 180, 200, 240, 300 m.

Other fittings are available - contact TUBES INTERNATIONAL® Technical Department.

code	I.D. [inch]	O.D. [mm]	thread size [inch]	working pressure [bar]	bursting pressure [bar]	bending radius [mm]	weight [kg/m]
TO-E210HD-20-L	3/4	30.0	3/4	210	525	120	0.42
TO-E210HD-25-L	1	38.3	1	210	525	155	0.74
TO-E210HD-32-L	1.1/4	47.4	1.1/4	210	525	240	1.04
TO-E250HD-12-L	1/2	22.3	1/2	250	625	75	0.28
TO-E250HD-20-L	3/4	30.1	3/4	250	625	120	0.47
TO-E250HD-25-L	1	39.6	1	250	625	155	0.80
TO-E250HD-32-L	1.1/4	49.6	1.1/4	250	625	240	1.23

CLEANING AND WASHING - cleaning of sewage systems

Accessories - sewage cleaning nozzles


picture	code	thread size	calibration	description	pic.
 <p style="text-align: right;">1</p>	RM-65105	1/4" BSP female	035	Nozzle intended for unclogging - without a centric hole. Material: acid-resistant steel. Working press.: up to 300 bar. Diameter: Ø19 mm.	1
	RM-65104		04		
	RM-65100		045		
	RM-65108		05		
	RM-65116		055		
	RM-65110		06		
	RM-65140		09		
	RM-65148		12		
	RM-65114		04		
	RM-65112		045		
 <p style="text-align: right;">2</p>	RM-65113		05	Nozzle intended for unclogging and cleaning - with a centric hole. Material: acid-resistant steel. Working press.: up to 300 bar. Diameter: Ø19 mm.	2
	RM-65115		055		
	RM-65118		06		
	RM-65120		075		
	RM-65125		09		
	RM-65130		10		
	RM-65146		11		
	RM-200049794		04		
 <p style="text-align: right;">3</p>	RM-200049795		045	Rotary nozzle intended for unclogging - without a centric hole. Material of the body: acid-resistant steel, of the rotor: brass. Working press.: up to 150 bar. Diameter: Ø19 mm.	3
	RM-200049800		05		
	RM-200049805	055			
	RM-200049810	06			
	RM-200049815	07			
	RM-200049820	08			
	RM-65161*	09			
	RM-65162**	12			

* - Reduced friction. Additional side hole.

** - Unclogging. Additional side and centric hole.



code	type	connection size	number of front holes	number of rear holes	Q [l/min]	min. pipeline diameter [mm]	description
RM-65250001	RD 200	1/4" BSP	3	4	20 ÷ 40	40	Rotary nozzle intended for unclogging - without a centric hole, with replaceable inserts. Material of the body: acid-resistant steel, of the rotor: brass. Working press.: up to 250 bar.
RM-65250002	RD 400	1/2" BSP	3	5	40 ÷ 120	70	
RM-65250003	RD 500	3/4" BSP	3	6	140 ÷ 180	100	
RM-65250004	RD 600	1" BSP	3	8	300 ÷ 360	120	

picture	code	type	connection size	hole calibration [mm]	hexagon size [mm]	description
	RM-65260001	VS 100	M4	0.6 ÷ 1.5	2	RD nozzle inserts. Material : acid-resistant steel. Working press.: up to 500 bar.
	RM-65260002	VS 200	M6	0.6 ÷ 2	2.5	
	RM-65260003	VS 300	M8	0.6 ÷ 2.5	3	
	RM-65260004	VS 400	M10	0.6 ÷ 3.8	4	